

Safety data sheet

1. Product and company identification

Product Name: **tgloy Capsules**
 Synonyms: Capsules with mercury and metal powder (alloy)
 Application: Capsules to produce amalgam for dental fillings.
 Supplier: **Technical & General Ltd.**
 2 Albion Place
 London
 W6 0QT
 Issued by: Technical Department
 Telephone No: + 44-20-8834 7575
 Telefax No: + 44-20-8834 7570

2. Composition/information on ingredients

Components Include and Risk Phrases	Cas-No	EG-No	Content (%)	Label	Symbol	TLV
Health and Environmental Hazardous Mercury (Hg) -			50	Toxic	Skull and cross-bones	x
Other Silver (Ag) Tin (Sn) Copper (Cu)			of 50% 45 31 24			

3. Hazards identification

Physical/chemical hazards:
 Human health hazards: Toxic by inhalation. Danger by cumulative effects. May cause sensitization by skin contact.
 Environmental hazards: May cause long-term effects in aquatic environment.

4. First-aid measures

Generally:
 Inhalation: Fresh air and rest. If you feel unwell, seek medical advice (show the label where possible).
 Skin contact: Wash off skin immediately with soap and water. If irritation appears, seek medical advice.
 Eye contact: Rinse immediately with plenty of water. If reddening/irritation appears, seek medical advice.
 Ingestion: Wash out mouth immediately with water. Thereafter drink a glass of water/milk. If you feel unwell, seek medical advice.

5. Fire-fighting measures

Specific Fire Hazards: No fire or explosion hazards. Mercury may evaporate in fire because of low boiling point. Do not breathe toxic fumes.
 Specific methods: Container near fire should be removed or cooled down with water.
 Extinguishing media: All extinguishing media.
 Extinguishing media **not** usable:

6. Accidental release measures

Personal precautions:

Environmental precautions:

Methods for cleaning up:

Collect spillage with mercury tong or -pipette, place in a tight bottle and cover with water. Cover smaller amounts with metal powder (alloy) and remove. Smaller drops in cracks can be removed with metal foil of zinc, tin or copper which binds mercury.

7. Handling and storage

Storage:

Handling:

8. Exposure controls/personal protection

Engineering measures:

Use only well-ventilated areas. Store packaging tightly closed. Avoid contact with skin. Avoid amalgam residues in dish-washer and sterilizer. Mercury vapour evaporates at elevated temperatures.

Personal protective equipment:

See - Mercury and amalgam in dental hygiene.

9. Physical and chemical properties

Physical state, form and colour: Silver-white, liquid metal and metal powder in welded sealed disposable capsules. Hg data below.

Odour: Without smell

pH:

Melting point/range (°C): -39

Boiling point/range (°C): 357

Flashpoint (°C):

Autoignition temperature (°C):

Decomposition temperature (°C):

Explosion properties:

Density (20 °C, kg/m³): 13 600

Solubility in water (weight-%): < 0,001

Solubility in organic solvents: Insoluble

Specific properties:

TLV 0,05 mg/ m³ (air saturated with mercury att 20 °C contains 13 mg/ m³).

Explosion limits:

Vapour density (air=1): 6,91

Vapour pressure (20 °C, mm Hg; kPa) 0,0012; 0,00016

Octanol/water partition coefficient:

10. Stability and reactivity

Stability:

Mercury emits vapour, especially when heated.

Decomposition products:

Specific properties:

Reacts violently with ammonia, chlorine, chlorine dioxide and nithromethane. Forms alloys with most metals, except iron, at ordinary temperatures.

11. Toxicological information

Generally:

Danger by cumulative effects.

Inhalation:

Toxic by inhalation. Mercury is absorbed mainly by inhalation of vapour.

Skin contact:

Harmful in contact with skin. May cause sensitization by skin contact.

Eye contact:

Ingestion:

Toxicity:

Mercury: LD₅₀ (oral, rat): 500 mg/kg

Specific effects:

12. Ecological information

Generally:

Mobility:

Persistence/Degradability:

Bioaccumulation:

Ecotoxicity

No toxicity for fish, daphnia or algae has been found for metallic mercury

13. Disposal considerations

Waste from residues: Hazardous waste: Collection should be carried out according to local community law. Do not empty into drains.
 Contaminated packaging: This material and/or its container must be disposed of as hazardous waste.

14. Transport information

UN	No: 2809	Pack Group: 3		
RID/RID-S, ADR/ADR-S (land)	Class:			
IMDG (sea)	Class: 8	Page: 8191	EmS No: 8-12	MFAG No:
Marine pollutant				
IATA (air)	Class:			
Note:				

15. Regulatory information

Label for supply: Toxic
 Symbol: Skull and cross-bones

Risk Phrases: R23 Toxic by inhalation
 R33 Danger by cumulative effects
 R43 May cause sensitization by skin contact
 R53 May cause long-term effects in aquatic environment

Safety Phrases: S1 Keep locked up
 S7 Keep container tightly closed
 S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Note: Complies with ISO 1559 BS EN 21559(metal powder) and ISO 1560 (mercury).

16. Other information

Literature references:

All information is related to the product as supplied and is provided on the understanding that it will be used in the way and for purposes as indicated and that user has taken all necessary precautions. Information contained in the publication is true and accurate to the best of our knowledge.

